

CLAIMS

We claim:

1. A method for communicating object data comprising:

generating a hash value based on object data representing a user of a local computer;

storing the object data at a storage location; and

returning an object name having the hash value and a location identifier

identifying the storage location, the object name enabling a user of a remote computer to access the object data.

2. A method as recited in claim 1 further comprising:

receiving a request for the object data, the request including the object name; and

retrieving the object data from a local cache based on the hash value.

3. A method as recited in claim 1 further comprising:

receiving a request for the object data, the request including the object name; and

in response to receiving the request, retrieving the object data from the location

using the location identifier.

4. A method as recited in claim 1 further comprising

receiving a request for the object data, the request including the object name; and

determining whether the requested object data is in a local cache based on the

hash value; and

1 if the requested object data is in the local cache, retrieving the object data from the
2 local cache,

3 otherwise, retrieving the requested object data from the location identified by the
4 location identifier.

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6 5. A method as recited in claim 4 wherein the retrieving the requested object
7 data from the location identified by the location identifier comprises:

8 retrieving the requested object data from network storage.

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10 6. A method as recited in claim 4 wherein the retrieving the requested object
11 data from the location identified by the location identifier comprises:

12 retrieving the requested object data from a local file system.

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14 7. A method as recited in claim 4 wherein the retrieving the requested object
15 data from the location identified by the location identifier comprises:

16 retrieving the requested object data from a remote file system.

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18 8. A method as recited in claim 7 wherein the retrieving the requested object
19 data from a remote file system comprises:

20 accessing the remote file system via a peer-to-peer connection.

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22 9. A method as recited in claim 7 wherein the retrieving the requested object
23 data from a remote file system comprises:

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accessing the remote file system via a connection through a switchboard server.

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1 10. A computer-readable medium having stored thereon computer-executable
2 instructions for performing a method comprising:

3 receiving a name associated with a user on a remote computer, the name including
4 location data and a hash value uniquely associated with a data object representing the
5 user; and

6 retrieving the data object from one of a local cache based on the hash value or a
7 location identified by the location data.

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9 11. A computer-readable medium as recited in claim 10 wherein the retrieving
10 the data object from one of a local cache based on the hash value or a location identified
11 by the location data comprises:

12 determining whether the data object is in a local cache based on the hash value;
13 and

14 if the data object is in the local cache, retrieving the data object from the local
15 cache;

16 otherwise, retrieving the data object from the location identified by the location
17 data.

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20 12. A computer-readable medium as recited in claim 11 wherein the retrieving
21 the data object from the location identified by the location data comprises retrieving the
22 data object from a remote file system.

1 13. A computer-readable medium as recited in claim 11 wherein the retrieving
2 the data object from the location identified by the location data comprises retrieving the
3 data object from a local file system.

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5 14. A computer-readable medium as recited in claim 11 wherein the retrieving
6 the data object from the location identified by the location data comprises retrieving the
7 data object from a network storage.

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9 15. A computer-readable medium as recited in claim 11 wherein the retrieving
10 the data object from the location identified by the location data comprises accessing a
11 remote computer via a peer-to-peer connection.

1 16. A system for managing objects representing users in an instant messaging
2 conversation, the system comprising:

3 a data object representing a user, the data object having an object name including
4 a location identifier and a hash value, the object name allowing; and
5 an object store operable to retrieve the data object from a location identified by
6 the location identifier and store the data object in a local cache based on the hash value.

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8 17. A system as recited in claim 16 wherein the object name further comprises
9 a creator identifier identifying a creator of the data object.

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11 18. A system as recited in claim 16 further comprising a transport protocol
12 stack enabling the object store to retrieve the data object from a remote storage location
13 over a peer-to-peer connection.

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16 19. A system as recited in claim 16 wherein the data object further comprise
17 metadata descriptive of the data object.

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19 20. A system as recited in claim 19 wherein the metadata comprises:
20 a friendly name field;
21 a type field indicating a type of data object; and
22 a hash value based on the metadata.

1 21. A system as recited in claim 16 wherein the location identifier comprises a
2 uniform resource locator (URL).
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4 22. A system as recited in claim 16 wherein the location identifier comprises a
5 uniform resource identifier (URI).
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